Defense Contract Management Command

ENTERPRISE RESOURCE PLANNING SYSTEMS IN THE AEROSPACE AND DEFENSE ENVIRONMENT

An Analysis and Assessment by a DCAA/DCMC/Industry Association Study Group

April 1999

PREFACE

The DCMC/DCAA/Industry Association Study Group would like to express its appreciation and gratitude to all the individuals who personally coordinated, planned, and participated in the site visits and other meetings. This included many Government, contractor and ERP system software supplier organizations who supported this effort.

The Study Group had an aggressive schedule to meet in order to fulfill the stated charter objectives. The enthusiastic cooperation of those involved enabled the study to be completed efficiently and effectively.

It is the Study Group's hope that with the initial assistance, and with subsequent continuing dialogue, DCMC, DCAA and Industry will better position themselves to maximize the benefits of ERP systems implemented in contractor organizations.

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Introduction

Enterprise Resource Planning (ERP) Systems are the next evolutionary step for Department of Defense (DoD) contractors in Information Technology (IT). Contractors are striving to replace or upgrade mainframe based legacy computer systems with client server based systems that incorporate many advanced features such as the use of the Internet and electronic data interchange (EDI). There are a number of other reasons why these systems are being implemented. In some instances contractors are implementing ERP systems to meet Year 2000 problems, but mostly they are striving to enhance communications and the use of common processes across multiple contractor sites or divisions.

ERP systems are business management systems that integrate most operational components of an organization (Figure 1). They are generally used to automate and integrate functions across the board, such as procurement, distribution, finance, human resources, engineering functions, sales force automation, manufacturing resources planning and project planning. Additionally, these systems allow for sharing common data and practices across a business, and provide access to information in a real-time environment.

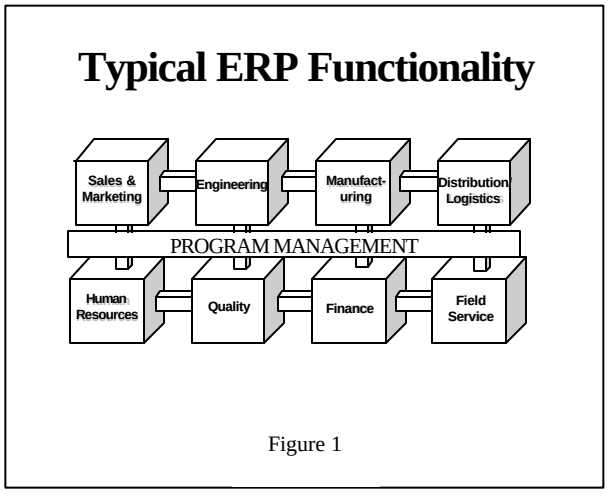

Figure 1

ERP systems fall into two broad categories. One category provides a single integrated system encompassing all business functions. The other provides a "best of breed" solution that encompasses fewer business functions in the single integrated system, but completes the enterprise system by developing interfaces between a core product and other suppliers' products. The ERP system software suppliers currently doing business with the defense industry are also developing, or have developed, Aerospace & Defense (A&D) industry-specific solutions that are integrated with their core systems. The current A&D ERP systems market is dominated by SAP of Waldorf, Germany. Other suppliers to this market included in this analysis and assessment study were BaaN (Netherlands) and PeopleSoft (U.S.A.).

ERP systems with enhanced functionality in areas such as product definition, sales and distribution, production and inventory, procurement, and finance, could have significant, positive implications on the DoD acquisition community (e.g., the use of supply chain management, EDI, Government-Industry collaboration, and system integration). Additionally, the application of ERP systems by the A&D industry represents a significant investment in cultural and process change to achieve a much more efficient and lean operation. Costs to implement an ERP system range from tens to hundreds of millions of dollars depending on enterprise complexity. Where savings have been estimated, payback tended to be in the two to five year range.

Background

Numerous discussions between the Defense Contract Audit Agency (DCAA), the Defense Contract Management Command (DCMC), and the defense related industry associations[1] indicated a better understanding of ERP systems, their effects on Government[2] and contractor practices and cost was necessary. Therefore, a joint DCAA, DCMC and Industry Association Study Group[3] was established in November 1998 to assess the status of ERP system implementation and the role Government personnel should play in the process.

[1] Aerospace Industries Association, Electronic Industries Alliance, and National Defense Industrial Association

[2] Wherever the term Government is used it refers to DCMC and DCAA, unless otherwise indicated.

[3] See Appendix 1 for a list of team members

The Study Group compiled Government, contractor, and ERP system software supplier observations and formulated recommendations concerning implementation, organization, education and training. Of particular importance was an understanding of barriers to the rapid adoption of these systems induced by Government policies, practices, and regulatory and statutory requirements, and also barriers to effective Government fulfillment of its mission by supplier products and contractor policies or practices.

The Study Group conducted a seven contractor site visit and interview program[4] from January to April 1999, supplemented by briefings and interviews of the three ERP system software suppliers whose products had been selected by the seven contractors at the sites visited. Sites selected were based on the results of a survey performed by DCAA, and various team members' knowledge concerning the phases of contractor system implementations, and the desire to obtain information on a cross section of major ERP system software suppliers. Contractor presentations were received describing their system implementations. These presentations included the contractor's actions to date, as well as future plans and associated milestones. The presenters were also asked to provide any perceived regulatory or compliance concerns and lessons learned. Contractors were asked to provide any recommendations to the Government, or other ERP system implementers that would enhance the effective implementation and use of ERP systems. The respective DCAA and DCMC field personnel also were interviewed to determine what actions they have taken or plan to take with respect to the ERP system implementations at their sites. As with the contractor personnel, they were asked to provide any lessons learned and recommendations to the Study Group that would help all parties understand the implications of ERP systems.

Although the seven site program may have been too limited to explore the full range of ERP implementation variables, such as ERP system software supplier, implementation strategy and approach, and contractor organization and complexity, significant valuable information was obtained which achieved the Study Group's mission and objectives[5].

[4] See Appendix 1 for the list of sites visited
[5] See Appendix 2 for the Study Group charter

Summary of Results[6]

A principal observation was the critical nature of the implementation approach as a success factor in ERP system installation. The most successful implementation approaches utilized strong internal leadership, a dedicated functional process and an information technology core team, supplemented by a small number of external or ERP system software supplier subject matter experts. Additionally, successful implementations typically did not change software code; the software remained a commercial-off-the-shelf (COTS) product.

Also found to be important for contractors was the need to address cultural change issues brought about by reengineered processes, differing roles and responsibilities of individuals involved, and the realization that reductions in staffing levels may follow the effective installation of ERP systems. As a general rule, ERP system implementation is roughly 80 percent process reengineering, communication, education and training, with 20 percent or less of the cost and effort a result of the software system itself. The length of time to implement these systems does not appear critical to implementation success. Rather, success depends upon commitment, leadership, and approach.

One very important result with respect to the DoD is that no statutory or regulatory requirements, nor any DCAA or DCMC policies or practices, were identified as barriers to effective contractor ERP system implementations. In part this may be attributed to the fact that, for all seven sites visited, the manufacturing operations portion of the ERP system, where borrow-payback, Defense Priorities and Allocation Systems, configuration control and Earned Value Management Systems issues might surface, had not yet been implemented. These more technically difficult areas were generally planned to be the last implemented. However, contractors expect the A&D industry-specific solutions developed by the system software suppliers will enable them to fully comply with Government regulatory requirements when installing these ERP systems. Not only were no regulatory or policy impediments to ERP system implementation identified, some aspects of the A&D industry-specific solutions (certain aspects of the A&D billing

[6] A detailed list of observations and recommendations follows this summary of results.

and EVMS functionality, for example) are being incorporated into the system software suppliers' general product releases.

Another important finding is there seems to be no need for developing new regulatory requirements, such as the material management & accounting system (MMAS) standards or the earned value management system (EVMS) evaluation criteria, to specifically address ERP systems. Again, this assessment is based upon the seven sites visited where the manufacturing operations portion of these systems have yet to be implemented, but it appears existing regulations will continue to sufficiently protect the Government's interests even after manufacturing operations implementation.

Current Government risk based management and auditing approaches are applicable to ERP systems. DCMC currently conducts performance based assessments at cognizant contractor locations. This activity facilitates the management of risk across all technical and business areas, systems, and processes. Changes as a result of ERP system implementation should be adequately addressed through these risk assessments. The current functional, risk based auditing approach inherent in DCAA's standard internal control review (ICR) procedures appears to be equally applicable to ERP systems. While all ten core internal control reviews have not been completed at any of the sites visited, existing ICR procedures have been sufficient for audits in process and completed to date.

There appeared to be a significant benefit at those sites where Government personnel were involved early in the contractor's planning and implementation of their ERP systems, even when this involvement was limited to receiving periodic, but regular status presentations. Contractor and Government representatives agreed that early DCAA and DCMC involvement in ERP system implementation is beneficial and highly desirable. This involvement includes participation on executive steering committees, IPT membership, periodic briefings by contractor ERP implementation personnel, and joint internal control reviews. The roles and participation of both DCMC and DCAA field personnel were local office decisions.

Our recommendations focus primarily upon Government involvement with contractor implementations, communication between the Government and contractors, and education and training. Proactive Government interaction, communication and coordination with the contractors, throughout the ERP system implementation life cycle, is key to ensuring the smoothest transition to an ERP system. Inherent in this proactive

involvement is the education and training of not only DCAA and DCMC, but contractors and ERP system software suppliers as well. DCMC and DCAA need to familiarize themselves with ERP systems, as well as understand how a specific contractor's implementation affects their audit and contract administration functions and processes. Contractors and ERP system software suppliers would benefit from additional understanding of Government regulations and requirements. Industry associations can also play a role as contractors implement ERP systems. They are strategically positioned to be the conduit between individual contractors as well as between contractors and the Government to ensure ERP best practices are shared and the benefits of ERP systems are incorporated into other initiatives such as the Integrated Digital Environment (IDE) and Lean Aerospace Initiative.

OBSERVATIONS

Contractor

1. Costs and benefits:

    a. Actual or projected ERP system costs for the sites visited range from tens to hundreds of millions of dollars. Actual or projected savings are in the range of a two to five year payback. Systems software, process changes, integration services, etc. costs at one single plant configuration site visited were approximately $26 million without including the MRP II phase of the implementation. ERP system software costs are about 20 percent of these total implementation costs. However, total ERP system implementation costs could be in excess of $300 million for a complex, multiple facility configuration.

    b. Benefits include a significantly reduced number of legacy systems, improved processes, consolidated functions, and inventory reductions. For example, a typical legacy environment could range up to 1,000 systems with up to 80 percent replaced by the ERP system.

2. Critical success factors for ERP system implementation as described by all contractors visited include:

    a. Strong, consistent executive management support, reinforcement and involvement in the selection and implementation process, and commitment for adequate funding. Effective, continual organizational communication of the purpose and role of ERP in the organization also were key.

    b. A management process nearly identical to a major system or product development and production program. This included strong program management of the implementation process built around an integrated team methodology, where a full-time, dedicated, co-located, internal core team with

strong functional and IT process subject matter experts was the mainstay of the implementation.

c. Development and utilization of strong internal ERP expertise.

d. Early involvement of Government personnel to specifically address system access and reporting requirements, and system internal controls.

e. Early decisions as to the role of process reengineering vs. the use of processes embedded in the ERP system and unequivocal commitment to the selected path.

f. Little or no change to the software code – commercial-off-the-shelf (COTS), with robust efforts to use the COTS system functionality. Rather than modifying the software to fit pre-existing or reengineered processes, contractors were mainly adopting business practices to take full advantage of the ERP system process models embedded in the software.

g. Extensive testing in conference room pilots[7] and sharing of implementation planning and application expertise (e.g. software application user groups).

h. Significant effort devoted towards verification of data integrity prior to "going live"[8]. Those sites incorporating this methodology experienced smoother transitions, reduced system stabilization time, and increased confidence in its use.

i. Planning and budgeting for end user training, and training as close to implementation as possible; it was recommended that 10 to 15 percent of the implementation budget be allocated to training.

[7] Conference room pilots are walk through sessions held early in the implementation process. They are used to introduce, review, and seek input on proposed designs of new business processes and systems from the key functional personnel impacted by the change.

3. Implementation of an ERP system led to significant change management issues (e.g., functional to process orientation) because of the high degree of process reengineering.

4. Contractors generally experienced higher than normal attrition, as high as 30 percent of the internal core team, of skilled ERP personnel during implementation and after "going live". One contractor used a phased bonus plan, and its attrition appeared to be lower than other contractors' at a comparable phase of ERP implementation and use. Another contractor utilized "super users" to backfill behind key employees that left; these were highly process experienced and IT competent personnel.

5. Most contractors did not use the entire available functionality of their core ERP system software. For example, several used packages from other system software suppliers for human resources and product data management functionality.

6. No contractors were using EDI or Internet enabled features of the various software packages. They were taking a wait-and-see attitude and might use this functionality in subsequent phases of implementation. ERP system software suppliers are enhancing their products with Internet capability.

7. Contractors were not integrating supply chain management into their ERP implementations. However, two sites, which have a prime to subcontractor relationship, were considering partnering with one another to incorporate this functionality into their ERP systems.

8. Those sites utilizing ERP system software with a more mature A&D process functionality had less non-compliance with Government requirements. Furthermore, ERP system software suppliers are enhancing their products to ensure full compliance.

[8] "Going live" refers to the actual date that a contractor has migrated from its legacy systems to its ERP system.

9. Some of the reasons these sites were implementing ERP were for Year 2000 compliance, enhanced communication across numerous contractor sites or divisions, and for the use of common processes across numerous contractor sites or divisions.

10. After "going live", contractors did not run their legacy and ERP systems in parallel. With the vast amount of process reengineering that had taken place prior to implementing the ERP system, comparisons between the legacy and ERP systems would have been impractical. However, contractors did ensure their data was accurate by rigorous testing of the ERP system data prior to "going live".

11. Some discussions between DCMC and contractor personnel indicated ERP might be tied into Integrated Digital Environment (IDE) efforts to maximize the use of ERP system functionality for civil/ military integration.

12. Every ERP system implementation is unique due to the contractors' differing operational processes and software applications. There is no single ERP system configuration for a particular system software supplier's product even though the software itself is standard.

Government

1. None of the contractors identified any regulatory requirements (FAR, CAS, etc.) or Government policies or practices as impediments to successful ERP system implementation. In part this may be attributed to the fact that the manufacturing operations portion of the ERP system, where borrow-payback, Defense Priorities and Allocation Systems, configuration control and Earned Value Management Systems issues might surface, had not yet been implemented. These more difficult areas were generally planned to be the last implemented. However, contractors expect the A&D industry-specific solutions developed by the system software suppliers will enable them to fully comply with Government regulatory requirements. ERP system software suppliers confirmed this. Not only were no regulatory or policy impediments to ERP system implementation identified, some aspects of the A&D

industry-specific solutions (certain aspects of the A&D billing and EVMS functionality, for example) are being incorporated into the system software suppliers' general product releases.

2. To date no significant CAS or FAR non-compliances have been identified from the ERP system implementations.

3. Current regulatory requirements for systems evaluation, such as those promulgated for MMAS and EVMS, sufficiently protect the government's interests. Therefore, ERP system specific standards and system evaluation criteria are neither necessary nor desirable.

4. The current functional, risk based auditing approach inherent in DCAA's standard internal control review (ICR) procedures appears to be equally applicable to ERP systems. While all ten core internal control reviews have not been completed at any of the sites visited, existing ICR procedures have been sufficient for audits in process and completed to date. The purpose of each internal control audit is to gather sufficient evidence to express an opinion on the adequacy of the contractor's relevant accounting and management systems and the related internal controls for compliance with applicable laws, regulations, and contract terms. The objective in performing internal control audits is to assess control risk to determine the degree of reliance that can be placed on the contractor's internal controls in relevant accounting and management systems as a basis for planning the scope of other related audits.

5. Changes to contractor technical and business areas, systems or processes, as a result of ERP system implementation, should be adequately addressed through DCMC's performance based risk assessments. Risk is managed to determine the priority, degree, and intensity of Contract Administration Office (CAO) surveillance needed at a specific defense contractor facility. DCMC CAO management, technical assessment, and operations personnel use a risk management approach that includes planning, assessment, handling, monitoring and documenting DCMC surveillance activity. Supplier performance is evaluated in three principal areas: performance,

schedule, and cost objectives. Risk ratings are assigned to each system or key process that is likely to significantly affect one of the three areas and are based on probability of occurrence and consequence of failure. Surveillance activities are planned according to risk assessments.

6. Good communication between contractor and Government personnel, early on and throughout the entire planning and implementation process, helped reduce implementation problems related to Government business practices and regulatory requirements.

7. The level of Government involvement varied between contractor sites. Contractor and Government representatives agreed that early DCAA and DCMC involvement in ERP system implementation is beneficial and highly desirable. This includes participation on executive steering committees, IPT membership[9], periodic briefings by contractor ERP implementation personnel, and joint internal control reviews[10].

8. DCMC and DCAA personnel expressed a need for more training in all areas, to include basic ERP system orientation, auditing and end user functionality.

9. Government access to the systems varied, but the level of access had no detrimental impact on the ability of DCAA and DCMC personnel to perform their duties. However, Government personnel felt that greater access would improve the efficiency and effectiveness of their performance. In some cases, contractor internal and external auditors had no more access than Government auditors did.

10. It was generally beneficial to allow a post implementation stabilization period prior to auditing certain functions affected by the new system. Internal control reviews (ICRs) were deferred when appropriate.

[9] Two sites were utilizing IPTs.
[10] These were performed at multiple locations.

11. Contractors generally expensed, or plan to expense, current state assessment, process reengineering and work force restructuring costs associated with ERP system implementation. This treatment is consistent with generally accepted accounting principles (GAAP) on accounting for costs incurred in connection with a consulting contract or internal project that combines process reengineering and IT transformation[11]. For costs incurred in fiscal years beginning after December 15, 1998, contractors generally expressed intention to treat other ERP costs in accordance with GAAP for costs of computer software developed or obtained for internal use.[12] However, DCAA has not yet verified their actual practices. Details as to what costs should be expensed and capitalized are set forth in EITF 97-13 and SOP 98-01.

[11] American Institute of Certified Public Accountants (AICPA) Emerging Issues Task Force (EITF) No. 97-13, *Accounting for Costs Incurred in Connection with a Consulting Contract or an Internal Project That Combines Business Process Reengineering and Information Technology Transformation*, November 1997.
[12] AICPA Statement of Position (SOP) 98-01, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*, March 1998.

RECOMMENDATIONS

Government

1. Government Involvement in ERP Implementation. The Government should become proactively involved in the ERP system implementation process by taking the following actions:

   a. Actively support contractor planning of ERP system implementation through the use of IPTs. Attendant with this, the DCAA Field Audit Office Manager and the DCMC CAO Commander should keep current on planning and implementation status. Government involvement should be planned with a prescribed course of orientation, expected future roles, and participation continuity.

   b. Obtain cost benefit analyses or business cases associated with the ERP implementation and ensure any identified costs and associated savings are reflected in forward pricing proposals.

   c. Evaluate the adequacy of disclosure statement, forward pricing rate, and system description revisions and cost impact statements, that result from contractor process reengineering.

2. Communication. The Government should:

   a. Communicate ERP information, relevant to the approaches and action they should take, to field personnel.

   b. Evaluate the propriety of Government participation in industry ERP user groups and Government/Industry symposia and conferences. For user groups and conferences where Government participation is appropriate, determine when, where and how often meetings are held, and who should attend. The purpose of this participation is to share lessons learned, discuss both Government and

industry concerns and to share in future ERP related developer and user information exchanges.

c. Coordinate with relevant industry associations[13] to the extent that they represent a source for their member companies and the Government in communicating ERP and enterprise IT policies and positions.

3. Training. The Government should:

a. Assess the need for training designed to provide all levels of Government personnel with an ERP system orientation. Determine what functional areas are involved and whether existing course(s) should be supplemented or whether a new course should be developed to address this need.

b. Provide information to field personnel on commercially available ERP training.

c. Develop and provide technically oriented ERP system training to each organization's IT experts.

d. DCAA should evaluate its internal control review training to determine whether it should be supplemented with information specific to ERP systems.

e. Identify what ERP audit related training contractor personnel attend, and determine whether this training is applicable to and available for Government personnel.

f. Require field level DCMC and DCAA management work with contractors to determine what functionally oriented end-user training is appropriate for Government personnel.

[13] Aerospace Industries Association, Electronic Industries Alliance, and National Defense Industrial Association

4. ERP System Software Approvals. The Government should continue its existing practice to approve or disapprove overall systems such as accounting, billing, estimating, etc. and should not approve or disapprove specific ERP system software supplier packages.

5. Government Access. DCAA and DCMC should establish the access and data reporting that would be the least intrusive for the contractors and would be the most beneficial for all parties. DCMC and DCAA need access to contractor information in order to perform their mission responsibilities.

Industry

1. Professional Organization Participation. Encourage Government participation in professional organizations[14] to broaden and deepen understanding of new enterprise IT developments.

2. Lessons Learned.

   a. Develop a knowledge base of lessons learned for planning and implementing ERP systems to enhance and accelerate the reengineering process. These lessons learned might include areas such as rapid issue resolution, post implementation retention of core ERP implementation team, use of conference room pilots to test the capability of the ERP software to meet the reengineered processes, and maximum use of ERP system software suppliers' support software.[15]

   b. Focus respective Industry Association Technical Committees on employing relevant standards, lessons learned, key performance metrics, and critical success

[14] These might include the American Production & Inventory Control Society, the Institute of Internal Auditors, or others.
[15] For example: Business Engineer from SAP and Orgware from BaaN

factors into their Integrated Business Systems[16]. Government participation should be encouraged.

3. Civil/Military Integration. Investigate opportunities for civil/military integration of Government, contractor, and system software supplier integrated technology systems to maximize information interoperability and minimize transaction cycle time. This effort could be incorporated into the existing IDE initiative.

4. User Group Workshops and Conferences. Encourage user groups to expand and increase awareness of workshops and conferences, to include encouraging relevant Government participation.

[16] Integrated Business Systems would include ERP, Program Data Management and Data Warehousing systems.

APPENDIX A

ERP Study Group Team Members

Stephanie Strohbeck Co-Team Leader	DCMC
Michael Weisz Co-Team Leader	DCAA
Wayne Murdock	DCAA
Carol Donato	DCAA
Ron O'Daniell	DCMC
Eric Kessler	DCMC
Bill Lonstein	DCMC
Tom Shaw	Industry Associations

Site Visit Locations

Lockheed Martin Vought Systems	Arlington, TX
Rolls-Royce Allison	Indianapolis, IN
Marconi Aerospace Systems, Inc.	Wayne, NJ
Boeing Military Aircraft & Missile Systems Group	St. Louis, MO
Northrop Grumman Electronic Sensors & Systems Sector	Baltimore, MD
Lockheed Martin Aeronautics Sector	Kennesaw, GA
Lockheed Martin Missiles & Space	Sunnyvale, CA

CHARTER
FOR
ENTERPRISE RESOURCE PLANNING STUDY GROUP

BACKGROUND

Enterprise Resource Planning (ERP) systems present a new method of corporate computing. They allow companies to replace their existing information systems, which are often incompatible with one another, with a single, integrated solution. By streamlining data flows throughout an organization, these commercial off the shelf (COTS) software packages project significant cost savings and dramatic gains in a company's efficiency with acceptable risk.

A joint DCMC/DCAA/Industry study group was formed to become familiar with and knowledgeable of the various ERP systems and to identify any policy and process issues that need to be addressed to keep the Government from becoming an impediment to contractors as they move to ERP systems.

OBJECTIVES

Understand the Government's role as contractors migrate to this new method of integrated corporate computing.

Examine the relationship of ERP systems to integrated management systems/initiative such as the Material Management and Accounting System (MMAS), Lean Aircraft Initiative (LAI), Integrated Digital Environment (IDE), Earned Value Management System (EVMS) and others as appropriate.

Survey people, contractors, and industry organizations that are transitioning to ERP systems. Determine how DoD and Industry can best partner to share insights, enablers, expectations, and lessons learned.

Identify training needs and regulatory concerns to include CAS, FAR, etc., and recommend associated guidance.

SPONSORS

Ms. Jill Pettibone, Executive Director, Contract Management Operations, DCMC
Mr. Larry Uhlfelder, Assistant Director, Policy and Plans DCAA
Mr. Earl Newman, Assistant Director, Operations DCAA

CHARTER
FOR
ENTERPRISE RESOURCE PLANNING STUDY GROUP

MILESTONES

Charter Approval – 25 November 1998
Project Plan and Schedule Approval – 24 November 1998
Interim Approval – 29 January 1999
Report Approval – 31 March 1999

EXIT CRITERIA

1. Conduct information and data gathering (s)
2. Coordinate with Industry, Defense Systems Management College (DSMC), professional organizations and groups to include the Open Applications Group (OAG), and Electronics Industries Alliance (EIA), and others as appropriate.
3. Evaluate all applicable regulations (impacts), policies, processes, and systems such as MMAS, EVMS, IDE, LAI, Single Process Initiative (SPI) and any other applicable current initiatives.
4. Identify lessons learned
5. Identify training for execs and field personnel
6. Identify policy/process impacts

DELIVERABLES

Charter – 24 November 1998
Briefings - Various
Report – 31 March 1999

TEAM MEMBERS

Stephanie Strohbeck, DCMC-OC, Co-Lead
Mike Weisz, DCAA-PIC, Co-Lead
Wayne Murdock, DCAA-OTS
Ron O'Daniell, DCMC-OB
Eric Kessler, DCMC-OB

RESOURCES

Actual effort required will be funded by the members' respective organizations.

ROLES AND RESPONSIBILITIES:

See project plan for details on specific roles and responsibilities.

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APPROVALS

Jill E. Pettibone 24 NOV 98
Ms. Jill Pettibone, Executive Director, Contract Management Operations, DCMC Date

25 Nov 98
Mr. Larry Uhlfelder, Assistant Director, Policy and Plans, DCAA Date

Earl J. Newman 25 Nov. 98
Mr. Earl Newman, Assistant Director, Operations, DCAA Date

ERP Software Supplier Information

SAP

SAP (Systems, Applications, and Products in Data Processing) is a German enterprise software supplier. SAP's enterprise software product is SAP R/3 (Real-time System, Version 3); the current release is version 4.5b. This product consists of a core release with 17 industry-specific solutions. The industry-specific solutions, including the one for the Aerospace and Defense (A&D) industry, were developed to meet requirements unique to each industry.

BaaN

BaaN has dual headquarters in Barneveld, The Netherlands and Reston, Virginia, USA. BaaN's current release enterprise software product is BaanERP. This product incorporates functionality to meet the requirements of the A&D industry. Earlier versions of the product (i.e. BaanIV) used an A&D industry-specific overlay to meet these requirements.

PeopleSoft

PeopleSoft has headquarters in Pleasanton, California. PeopleSoft's current release enterprise software product is PeopleSoft 7.5. This product can be highly customized to meet requirements unique to each industry, including A&D, and each customer. Incorporated within the PeopleSoft 7.5 product are eleven industry-specific solutions; none of these are A&D industry-specific.